

Concan, Texas March 29, 2017

David Rayburn

#### Concan, Texas

- 2007 Dodge Ram pickup
  - 20-year-old driver
  - Northbound



- 13 passengers
- 66-year-old driver
- Southbound







## Crash Sequence and Scene

- Truck crossed centerline
- Struck left front of bus
- Witnesses reported bus operating safely
- Bus speed 60–62 mph
- Speed limit 70 mph





## Precrash Video of Truck Operation

- Cell phone video of truck
- Crossed edgeline 37 times
- Crossed centerline 19 times
- Outside travel lane 67% of time
- Estimated speed of truck: 69 mph







# Bus Damage









# Truck Damage

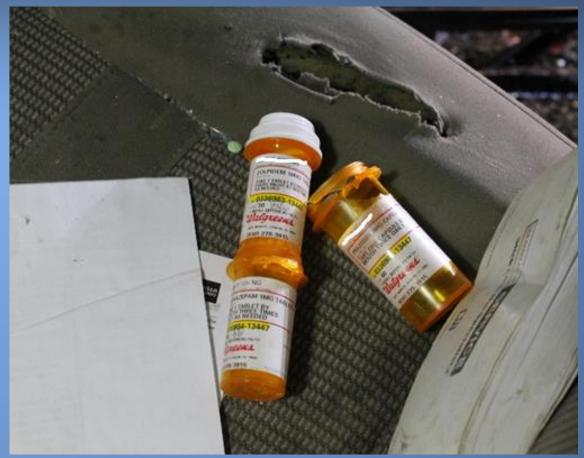






# Drugs Found in Truck







# Injury Information

- Fatalities (13)
  - Bus driver
  - 12 bus passengers
- Serious injuries (2)
  - Truck driver
  - 1 bus passenger



#### On-Scene Staff

Jennifer Morrison

David Rayburn

Rafael Marshall, PhD

David Pereira

Ronald Kaminski

Michele Beckjord

Kris Poland, PhD

Robert Squire

Investigator-in-Charge

**Highway Factors** 

Human Performance

Vehicle Factors

Survival Factors

Survival Factors

Biomechanics

Crash Reconstruction



# Report Development Staff

Don Karol

Tom Barth, PhD

Debbie Stocker

Julie Perrot

Ivan Cheung, PhD

Alice Park

Dr. Nicholas Webster

Dan Horak, PhD

Jane Foster

**Project Manager** 

Survival Factors Support

Editor

Safety Recommendations

Data/Mapping Graphics

Video Graphics

**Medical Officer** 

Video Analysis

Recorders Specialist



#### Parties to Investigation

- Texas Department of Public Safety
- Texas Department of Transportation
- Freedman Seating Company
- Turtle Top, Inc.



## Noncontributing Factors

- Qualification and familiarity with vehicles/roadway
- Highway and weather
- Mechanical condition of either vehicle
- Bus driver medical condition, fatigue, impairment by alcohol or other drugs, or cell phone distraction
- Truck driver cell phone distraction



# Safety Issues

- Drug-impaired driving
  - Detection of drug-impaired drivers
  - Drug-impaired driving countermeasures
- Medium-size bus seat belt systems

